THE EFFECT OF PERCEIVED STUDENT EFFORT ON TEACHER IMPRESSIONS OF STUDENTS WITH LEARNING DIFFICULTIES

By

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ABSTRACT

The purpose of this study was to investigate whether vignettes could allow for differentiation of perceived effort, and if so, would perceived student effort have an effect on teacher impressions of students and whether they would refer for special education services. Eighty-six teachers with an average of eight years of teaching experience participated in the study. They read four vignettes of students experiencing learning difficulties and answered questions regarding their perceptions of student effort, overall impression of the student, and whether they would refer the student for special education services. Results indicated that the vignettes can be used to differentiate between perceptions of high and low effort. Results further indicated that high effort was associated with overall positive impressions of students, while low effort was associated with negative impressions. There was no significant relationship between perceived effort and referral for special education services.

Keywords: Teacher Perceptions, Student Effort, Learning Difficulties, Teacher Impressions of Students, Referral for Special Services.

INTRODUCTION

According to Webster's dictionary, effort involves an exertion of physical or mental power in performing an act or aiming at an object; it involves energy directed toward a particular goal and implies a conscious attempt to achieve or accomplish a goal/task. Meltzer, Katzir-Cohen, Miller and Roditi (2001) defined effort for their research study as "a conscious attempt to achieve a particular goal through persistence over time" (p. 86). These definitions indicate that effort can be observed and that the amount of effort expended can be judged.

In a series of investigations by Meltzer and colleagues (Meltzer, Roditi, Houser, & Perlman, 1998; Meltzer et al., 2001; Meltzer, Katzir, Miller, Reddy, & Roditi, 2004; Meltzer, Reddy, Pollica, Roditi, Sayer, & Theokas, 2004), students with learning disabilities rated their level of effort as average, but lower as compared to average-achieving peers. The self-ratings of such students was, however, significantly higher than the ratings given by their teachers. Of particular relevance to this study is teacher perceptions of student effort.

Meltzer et al. (1998, 2001) had 57 general education teachers from grades 4 through 9 rate students with Learning Disabilities (LD) and those achieving at an Average Achievement level (AA) on several variables. Each teacher in the study was asked to identify 12 students to participate, 6 with LD and 6 with AA. On the effort variable as reported in both the 1998 and 2001 studies, teachers rated students with learning disabilities significantly lower than students with average achievement. The investigation also noted that in general, teachers rated the group of students with LD more negatively than the students rated themselves. Below average ratings from teachers for the LD group were obtained on strategy use, academic performance, and organization.

Meltzer, Katzir et al. (2004) implemented strategy instruction into the classroom curriculum for a subsample of the students previously identified by the teachers. Teacher ratings of effort for the LD group improved, but again remained lower than average achievers. Meltzer, Reddy et al. (2004) extended their investigation in this

study and assessed the relationship between academic self-perception, effort, and strategy use. With respect to the effort variable, students with LD who had positive academic self-perceptions were rated by their teachers as similar to non-LD students, while students with LD who had negative academic self-perceptions were rated as lower in effort by their teachers.

There is a disparity in teacher perceptions regarding effort by students with and without learning disabilities, and many factors color perceptions. For example, in the Meltzer et. al., 2001 study, it was noted that the perceptions of teachers regarding effort was influenced by the academic success of the student and not the existence of a LD. Students with LD who were achieving successfully were rated as having above average effort, similar to their non-LD peers. However, for the low-achieving group, more negative ratings were given to students with LD as compared to non-LD low-achieving peers. In the Meltzer, Reddy et al., 2004 study, teacher perception of effort was mediated by the students' academic self-perception.

There are numerous variables that contribute to the ratings of students in classrooms by their teachers: knowledge of the student's skill levels, history, personality factors, and behavior can impact teacher perceptions. If teachers are provided with vignettes of students, not those they teach nor those they select, will they distinguish between levels of effort? If differentiation between perceived effort can be made, will teachers view such students in a positive or negative way depending on effort? Finally, does perceived effort have an impact on who they refer for special education testing? These are the questions which guided this investigation.

Method

Participants

Eighty-six teachers, 62 females and 24 males, participated in this study. They had an average of 8 years of teaching experience. Thirty-five taught at the elementary level and 41 taught at the secondary level. In addition, 17 were certified in special education.

Materials

The primary author of this study created four vignettes which were adapted from Raim (1982). Each vignette gave a description of a student in the areas of academic achievement, task completion, and classroom behavior. The vignettes are presented in the Appendix. Two of the vignettes were designed to suggest that the student displayed a high degree of effort, and two were designed to portray low effort. The teachers were asked to rate their perceptions of the student described by responding to a series of questions. The scale completed by the teachers after reading each vignette involved Likert ratings ranging from 1 to 4 for some items and categorical variables for some items. The name of the student and gender was inserted into each scale that followed the vignette. The questions were as follows:

- What is your impression of the amount of effort ___ puts into his/her schoolwork based on the information in the profile: 1=a little, 2=some, 3=a lot, and 4=more than enough.
- What is your overall impression of ___? 1=extremely negative, 2=somewhat negative, 3=somewhat positive, 4=extremely positive.
- Do you feel that ___ should be referred for special education services? Yes No
- If yes (to previous item), for what category?

Learning Disability Behavior/Emotional Both

Thus, the items on the questionnaire included their overall impression of the student, their perception of the amount of effort the student puts into schoolwork, whether the student should be referred for special education, and if so, what was the primary concern/reason, learning or behavior.

Procedure

All of the participants were public school teachers. The majority of the participants completed the questionnaire in a graduate level course taught in the School of Education at a suburban public university. Some of the participants completed the questionnaires in their respective school district at the end of a faculty meeting.

Results

Perceptions of High versus Low Effort

The initial analysis of the data focused on teachers' perception of high versus low effort expended by the child. The four vignettes were written so as to create high effort situations (Vernon and Terry) and low effort situations (Carl and Sharon). This analysis addresses whether participants viewed the situations with the same perception as the authors had when creating the vignettes. Scores for effort range from 1 (a little) to 4 (more than enough). A mean score of 2.5 divides the low from high effort scores. The means (M) and standard deviations (SD) for effort for each of the four vignettes are found in Table 1. They indicate that Vernon (M = 3.28) and Terry (M = 2.86) fall above the mean score of 2.5, and Carl (M = 1.9) and Sharon (M = 1.70) fall below the mean score of 2.5.

Paired sample t-tests were performed on each pair of scores to examine whether there are significant differences between effort scores for each of these vignettes. Results indicate that there is no significant difference ($t_{1.85}$ = -1.09, p = .279) between the effort scores for Carl (M = 1.79) and Sharon (M = 1.70), indicating that the perceptions of Carl's and Sharon's effort are similar and can be categorized as low effort. Support that effort scores on the vignettes can be categorized as significantly different for high effort (Vernon and Terry) versus low effort (Carl and Sharon) were the findings that Vernon's (M = 3.28) effort scores were significantly different than Carl's ($t_{1.85}$ = 14.65, p < .001) and Sharon's ($t_{1.85}$ = 17.32, p < .001). Terry's (M = 2.86) effort scores were significantly different than Carl's ($t_{1.85}$ = 10.81, p < .001) and Sharon's (t = 14.70, p < .001). However, Terry's and Vernon's effort scores were also significantly different ($t_{1.85}$ = -5.02, p < .001). This is likely because Vernon's effort score was very high (3.28) and Terry's score can only be categorized as high (2.86).

Vignette (n=86)	Mean	Standard Deviation
Vernon	3.28	.59
Terry	2.86	.58
Carl	1.79	.71
Sharon	1.70	.58

Table 1. Mean Effort Ratings (Means and Standard Deviations) for Each Vignette

Based on these results it is concluded that Terry and Vernon are perceived to exhibit high effort, whereas Sharon and Carl are perceived to exhibit low effort. This result supports that the vignettes are different and can be reliably used to measure high or low effort.

The Effect of Perceptions of Effort on Teachers' Impressions of the Child

The next investigation addressed whether the teacher's perception of the child's effort affects the teacher's impression of the child. Scores for impression range from 1 (extremely negative) to 4 (extremely positive). As with effort scores, a mean score of 2.5 divides the low from high impression scores. Overall impression scores for Vernon (M = 3.56, SD = .55) and Terry (M = 3.26, SD = .58) were above the mean score of 2.5 (i.e., positive), whereas overall impression scores for Carl (M = 2.22, SD = .62) and Sharon (M = 2.30, SD = .56) were below the mean score of 2.5 (i.e., negative).

Frequency counts were used to examine how many ratings indicated positive impressions (i.e., Likert scores of 3 or 4) versus negative impressions (i.e., Likert scores of 1 or 2) for Terry and Vernon together (high effort group) and for Sharon and Carl together (low effort group). Results of this analysis are found in Table 2. It is clear from these frequency counts that the majority of ratings for the high effort group are positive (145; 99%) whereas the majority of ratings for the low effort group are negative (113; 74%). Table 2 shows that teachers' impressions overall of Vernon (100%) and Terry (97%), who were perceived to show high effort was overwhelmingly positive. In contrast, 113 teacher ratings (74%) reflected a negative impression of

	Impression	
Effort	Positive	Negative
High effort	145 (99%)	2 (1%)
Vernon	80 (100%)	0 (0%)
Terry	65 (97%)	2 (3%)
Low effort	40 (26%)	113 (74%)
Carl	13 (18%)	59 (82%)
Sharon	27 (33%)	54 (67%)

Table 2. Frequency Counts and Percentage for Effort by Impression

those in the low effort group: Carl (59; 82%) and Sharon (54; 67%).

The Effect of Perceptions of Effort on Teachers' Referral for Special Education Services

The last investigation addressed whether the teacher's perception of the child's effort affects whether the teacher will refer the child for special education services. Frequency counts were used to examine how many teachers indicated they will or will not refer Vernon and Terry together and Carl and Sharon together. These data are presented in Table 3. No clear pattern emerges from these frequency counts related to effort, although the majority of the ratings (185 versus 113) indicate that the students would be referred. For all four vignettes, the majority of participants indicated that they would refer the child. The number of ratings indicating that each child should be referred ranged from 51% (Terry) to 74% (Carl).

Participants were then asked whether they would refer the child for "LD, Behavioral/Emotional, or Both." Some teachers who indicated referral did not answer this question and some who indicated they would not refer answered it. Thus the data set for this variable was unable to be effectively interpreted.

Discussion

The vignettes were developed to portray high and low effort conditions, and the results support that the vignettes were able to differentiate these conditions. Teachers clearly perceived Terry and Vernon to be students displaying high effort, and they perceived Carl and Sharon to exhibit low effort. Such results have much heuristic value in that these vignettes can be used and modified for future research. When selecting their own students for effort as has been done in previous research, conditions cannot be manipulated, but through the use of these vignettes future research can modify the descriptions according to what variables would be under investigation. For example, descriptions can vary in age and ethnicity; additional information can be presented regarding past history and specific grades; and teachers could be asked to signify the characteristics within each vignette that lead to a value of high versus low effort. In addition, the vignettes can be counterbalanced to control for order effects.

	Referral	
Effort	Will Refer	Will Not Refer
High	87 (59%)	60 (41%)
Vernon	53 (66%)	27 (34%)
Terry	34 (51%)	33 (49%)
Low	98 (65%)	53 (35%)
Carl	53 (74%)	19 (26%)
Sharon	45 (57%)	34 (43%)

Table 3. Frequency Counts and Percentage for Effort by Referral

The results provide support for the conclusion that perception of high effort leads to a positive impression of the child whereas perception that the child is putting forth low effort is likely to result in a negative impression by the teacher. Ninety-nine percent of the ratings were positive for the students perceived as exhibiting high effort. The results for the low effort group were more mixed, but the majority of the ratings for this group were negative (74%). This is consistent with previous literature. If teachers have a more positive impression of students who exhibit high effort, does this impression affect other factors such as grades assigned or number of discipline referrals made? These could be questions for future research.

The results do not indicate that perception of effort has an effect on referral for special education. The majority (62%) of ratings indicated that teachers would refer for special education whether or not the child was perceived as putting forth effort. Referral for special education is based on a multitude of factors involving general student achievement, ability to maintain passing grades, and success on state assessments. Referral is further affected by the current model of Response to Intervention (RtI), where students participate in specific interventions of varying intensity depending on their learning difficulties, and the response to such interventions leads to decisions about needs for diagnostic evaluation. Future research could add descriptions of participation in prior interventions as an independent variable, along with variables such as effort and grades to determine which factors are more prominent in referral for special education assessment.

There are several limitations to the present study. First, the

sample of teachers was primarily drawn from graduate courses in education. A more heterogeneous sample, especially one reflecting different grade levels and teacher experience levels, would improve the study's quality. Second, the attempt to investigate the category of referral was not successful as many teachers did not respond appropriately to the question asked. It would be important in future studies to examine not only what category the referral would fall in, but also whether they would refer for non-special education services (e.g., Tier 2 interventions). The question could also have been improved by asking the teachers if they would refer for evaluation to consider special education versus having them select a specific disability. Third, the vignettes were short and provided basic information; improvement could occur by lengthening the descriptions and providing more specific information to address the research questions.

References

[1]. Meltzner, L., Katzir, T., Miller, L., Reddy, R. & Roditi, B. (2004). Academic self-perceptions, effort, and strategy use in students with learning disabilities: Changes over time. *Learning Disabilities Research & Practice,* 19(2), 99-108.

[2]. Meltzner, L., Katzir-Cohen, T., Miller, L., & Roditi, B. (2001). The impact of effort and strategy use on academic performance: Student and teacher perceptions. *Learning Disability Quarterly,* 24, 85-98.

[3]. Meltzner, L., Reddy, R., Pollica, L.S., Roditi, B., Sayer, J., & Theokas, C. (2004). Positive and negative self-perceptions: Is there a cyclical relationship between teachers' and students' perceptions of effort, strategy use, and academic performance? *Learning Disabilities Research & Practice,* 19(1), 33-44.

[4]. Meltzner, L., Roditi, B., T., Houser, R.F., & Perlman, M. (1998). Perceptions of academic strategies and competencies in students with learning disabilities. *Journal of Learning Disabilities*, 31(5), 437-451.

[5]. Raim, J. (1982). *Case reports in reading and learning disabilities: Psycho educational Evaluation and Remedial Planning.* Springfield, IL: Charles C. Thomas.

Appendix: Vignettes for each of the four students being rated

Name and Age assigned to Case	Vignette
Vernon T. 12 years old	Kindergarten, first grade, second grade, and third grade were recalled as easy years for Vernon. During fourth grade, Vernon began to have trouble in reading and received special tutoring. At the end of the fourth grade his reading test scores were still one year below grade level. Junior high school seemed to be extremely difficult academically for Vernon. When he did not receive a failing grade in a class on his report card, the grade was in the 70s. Vernon's teachers reported that he was not a behavior problem and had no trouble getting along with his peers. In addition, his teachers felt that he tried very hard to do his best in class. He completed all of his classwork on time and the quality of his work, even when answers were wrong, suggested that he made the most of the class time dedicated to completing the assignment. He would frequently ask questions in class. If he had a question that he felt other students might laugh at, he would ask it after class or come by after school. None of his teachers were able to recall a time when he showed up to class without his homework.
Terry L. 12 years old	Terry attended nursery school. Kindergarten and first grade were recalled as hard years for her, and she repeated first grade. In spite of the extra year of primary school, in second grade a reading problem was recognized. Reading scores at that time were approximately one year below grade level. During the third and fourth grades, Terry received special tutoring, but at the end of the fourth grade her reading test scores were still one year below grade level. Junior high school seemed to be fairly successful academically for Terry, with the exception of English. Her other grades were in the 70s and 80s. Terry's teachers reported that she was not a behavior problem. Several of them observed that she appeared to learn better when she worked with a teacher alone. Often she was embarrassed to ask questions in the classroom when she did not understand. She had one classmate who was in most of her classes and with whom she was very competitive. She was very diligent in completing and turning in any classwork at the appropriate time. She usually showed up to school with her homework and admitted she was better at getting it done when she had someone, such as her mother, checking up on her.
Carl S. 12 years old	Carl's Kindergarten and first grade teachers considered him to be a weak reader. However, by second grade, his Reading scores were on grade level. He did fine during his third grade year, but at the end of the fourth grade, his reading test scores were one year below grade level. Junior high school seemed to be successful academically for Carl. He made high 90s in Math, and his other grades were in the 80s. Carl's teachers noted that he had some problems with self-control. He would occasionally get into trouble, usually due to the violent reaction he would have when other students would tease him. These reactions appeared to be impulsive. Carl's teachers found that it was difficult to offer him suggestions or criticism of his work. He would often become upset upon hearing their remarks. His English teacher had a paraprofessional assigned to help him in class, but he refused to work with her. His teachers indicated that he had no problem completing work assigned in class. His answers would often suggest that he did not understand the directions for the assignment or fully master the material presented in class. Carl had trouble completing his homework. Teachers had checked his assignment notebook and found that he did not normally fill in his homework assignments.

Sharon N. 12 years old	Sharon attended nursery school. Kindergarten, first grade, and second grade were recalled as enjoyable experiences for her. During the third and fourth grades, Sharon began having some trouble in Math. Junior high school seemed to be fairly successful academically for Sharon, with the exception of Math and English. Her other grades were in the 80s and 90s. Because her mother was unhappy with her performance in Math and English, she believed Sharon had a learning disability and requested a diagnostic assessment. As she went through late elementary and entered junior high, Sharon's teachers began to report concern about her behavior. Each year, she got into at least one serious fight with another youngster. Her actions in the classroom included being provocative toward the other children and refusing to listen to her teachers. Sharon was unpredictable when it came to completing her classwork and homework. As long as she was interested in what was being studied, she would complete the work. Otherwise, the work was turned in incomplete. The quality of completed assignments suggested that she was capable of doing the work expected of her.

ABOUT THE AUTHORS

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